

AMENDMENTS TO THE CLAIMS:

Claim listing:

1-51. (Canceled)

52. (Currently Amended) A method of optimizing a shipment of merchandise ~~by determining one or more maximum loads of one or more transport vehicles, the~~ the shipment being to a first receiver maintaining a first inventory of merchandise at a first receiver location and to a second receiver maintaining a second inventory of merchandise at a second receiver location, the shipment of merchandise being from a first shipper located at a first source location and from a second shipper located at a second source location, said method comprising:

determining the limits of the merchandise required to be maintained for the first inventory according to one or more first metrics in response to first data received from the first receiver;

determining the limits of the flow of merchandise required to be maintained for the second inventory according to one or more second metrics in response to second data received from the second receiver; and

determining one or more maximum loads of one or more transport vehicles at least in part by calculating an amount of merchandise for shipment from the first and second shippers by the one or more transport vehicles from the first and second sources to the first and second receivers that reduces logistics costs and that results in shipment of merchandise within the limits of merchandise required to be maintained for the first inventory and within the limits of merchandise required to be maintained for the

second inventory according to an algorithm employing at least the one or more first metrics, the one or more second metrics, the first data and the second data.

53. (Previously Presented) The method of claim 52 wherein the one or more first metrics comprise a level of the first inventory and wherein the one or more second metrics comprise a level of the second inventory.

54. (Previously Presented) The method of claim 52 wherein the one or more first metrics comprise prescheduling of the delivery of the merchandise to the first receiver and wherein the one or more second metrics comprise prescheduling of the delivery of the merchandise to the second receiver.

55. (Previously Presented) The method of claim 52 wherein the merchandise comprises first merchandise having a first priority and second merchandise having a second priority less than the first priority and wherein the one or more first and second metrics comprise at least one priority value.

56. (Previously Presented) The method of claim 55 wherein the first merchandise and the second merchandise comprise the same type of merchandise.

57. (Previously Presented) The method of claim 55 wherein the first merchandise and the second merchandise comprise different types of merchandise.

58. (Previously Presented) The method of claim 52 wherein the one or more transport vehicles have one or more capacities and wherein the one or more first and second metrics comprise the amount of the one or more capacities filled with the merchandise.

59. (Previously Presented) The method of claim 52 and further comprising the step of labeling the products with destination indicia.

60. (Previously Presented) The method of claim 59 wherein the labeling comprises the step of applying at least one of an SKU code, pallet tag, and UPC code.

61. (Previously Presented) The method of claim 52 wherein the one or more first and second metrics comprise a quantity of the merchandise and a time of transportation of the merchandise.

62. (Previously Presented) The method of claim 52 wherein the merchandise comprise at least first products and second products and wherein the one or more first and second metrics comprise a mix of the first products and second products.

63. (Previously Presented) The method of claim 52 wherein the one or more first and second metrics comprise selection between the first source and the second source.

64. (Previously Presented) The method of claim 52 wherein said determining the limits of the merchandise required to be maintained for the first inventory comprises deriving from the first data the level of the first inventory and identifying the quantities of the merchandise shippable to maintain the first inventory as required.

65. (Previously Presented) The method of claim 64 wherein said determining the limits of the merchandise required to be maintained for the second inventory comprises deriving from the second data the level of the second inventory and identifying the quantities of the merchandise shippable to maintain the second inventory as required.

66. (Previously Presented) The method of claim 52 wherein the merchandise is available at a distribution point displaced from the first and second receiver locations

and displaced from the first and second shipper locations, wherein the one or more transport vehicles have one or more capacities, and wherein said calculating comprises:
calculating a quantity of the merchandise for shipment by the one or more vehicles from the distribution point to the first receiver location; and
calculating a quantity of the merchandise for shipment by the one or more vehicles from the distribution point to the second receiver location.

67. (Previously Presented) The method of claim 66 wherein said calculating further comprises:

calculating a quantity of the merchandise for shipment by the one or more vehicles from the first source to the distribution point; and
calculating a quantity of the merchandise for shipment by the one or more vehicles from the second source to the distribution point.

68. (Previously Presented) The method of claim 66 wherein the distribution point comprises a cross-dock.

69. (Previously Presented) The method of claim 66 wherein the distribution point comprises a warehouse.

70. (Previously Presented) The method of claim 52 wherein the first receiver is independent from the second receiver.

71. (Previously Presented) The method of claim 70 wherein the first receiver and the second receiver comprise different legal entities.

72. (Previously Presented) The method of claim 52 wherein the first source is independent from the second source.

73. (Previously Presented) The method of claim 72 wherein the first source and the second source comprise different legal entities.

74. (Previously Presented) The method of claim 52 wherein the first and second receivers are distributors of the merchandise.

75. (Previously Presented) The method of claim 52 wherein said calculating comprises calculating shipment of the merchandise from the first and second shippers jointly.

76. (Previously Presented) The method of claim 52, wherein the steps are carried out by a third party independent of the sources and the receivers.

77. (Previously Presented) The method of claim 52, wherein the one or more first and second metrics comprise a maximum feasible order size and wherein the step of calculating comprises calculating the maximum feasible order size that maintains the inventory within the amount of products required to be maintained.

78. (Previously Presented) The method of claim 52 wherein the steps are implemented by computer hardware, computer software or a combination of computer hardware and computer software.